

Dailey Report Cruise 4

October 1, 2010

This is the fourth cruise of the MC252 Deep water sediment sampling program, R/V Gyre. Three stations were sampled (LBNL-1, ALT-NF-001, and NF-006-MOD), one cast per station. Little black granules that may be weathered oil were observed. A slight sheen was present in overlaying water at site LBNL-1. Little brown globules were observed in Core 3 at LBNL-1. ROBIO was dropped at the start before any sampling sites.

Station 1

1. Station ID: LBNL-1
2. Average Lat: 28.704972
Average Lon: -88.492633
3. Depth: 1561m
4. Time Corer Deployed: 10:15
Time Corer Recovered: 10:46
Time Corer on Deck: 11:20
5. Sample nomenclature:

Sample Type(sediment or overlaying water) – Date – Ship – Site ID – Analysis Type – Unique Identifier

6. LBNL Sampling Team: Kevin McClay and Julian Fortney
7. Location Notes: 1 cast attempted. Overlaying water was clear and easy to filter. Soft sediment interface, likely drilling mud. A slight sheen was observed on top of water after pumping.
8. LBNL samples:

Core number 1: GT0030

| Sample ID | Sample Type | Volume | Storage |
|-----------------------------|-------------|--------|---------|
| SE-20101001-GY-LBNL1-BC-120 | Intact Core | NA | -80C |
| SU-20101001-GY-LBNL1-BC-126 | AODC | 20ml | 4C |
| SU-20101001-GY-LBNL1-BC-127 | DNA Filter | 700ml | -80C |
| SU-20101001-GY-LBNL1-BC-128 | DNA Filter | 710ml | -80C |

Core number 2: GT0038

| Sample ID | Sample Type | Volume | Storage |
|-----------|-------------|--------|---------|
|-----------|-------------|--------|---------|

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|-----------------------------|----------------------|-------|------------------------------|
| SE-20101001-GY-LBNL1-BC-121 | Intact Core | NA | -80C |
| SU-20101001-GY-LBNL1-BC-129 | AODC | 20ml | 4C |
| SU-20101001-GY-LBNL1-BC-130 | Culture | 10ml | 4C |
| SU-20101001-GY-LBNL1-BC-131 | RNA Filter | 700ml | -80C with 10ml RNA later |
| SU-20101001-GY-LBNL1-BC-132 | RNA Filter | 800ml | -80C with 10ml RNA later |
| SU-20101001-GY-LBNL1-BC-133 | Single cell genomics | 1.5ml | -80C with 0.5ml 60% glycerol |
| SU-20101001-GY-LBNL1-BC-134 | Single cell genomics | 1.5ml | -80C with 0.5ml 60% glycerol |
| SU-20101001-GY-LBNL1-BC-135 | Single cell genomics | 1.5ml | -80C with 0.5ml 60% glycerol |

Core number 3: GT0003

| Sample ID | Sample Type | Volume | Storage |
|-----------------------------|----------------------|------------------|-------------------------------|
| SE-20101001-GY-LBNL1-BC-122 | Single cell genomics | 1ml (sediment) | -80C with 0.5ml 60% glycerol |
| SE-20101001-GY-LBNL1-BC-123 | AODC | 1ml (sediment) | 4C with 0.1ml of formaldehyde |
| SE-20101001-GY-LBNL1-BC-124 | Culture | 1ml (sediment) | 4C |
| SE-20101001-GY-LBNL1-BC-125 | RNA | 1.5ml (sediment) | -80C with 10ml RNA later |
| SU-20101001-GY-LBNL1-BC-136 | SIP | 125ml | 4C |
| SU-20101001-GY-LBNL1-BC-137 | Nutrients | 100ml | -80C |
| SU-20101001-GY-LBNL1-BC-138 | VOA | 40ml | 4C with 0.05ml HCL |

Station 2

1. Station ID: ALT-NF-001
2. Average Lat: 28.704972
Average Lon: -88.370508
3. Depth: 1543m
4. Time Corer Deployed: 13:53
Time Corer Recovered: 14:25
Time Corer on Deck: 15:01

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5. Sample nomenclature:

Sample Type(sediment or overlaying water) – Date – Ship – Site ID – Analysis Type – Unique Identifier

6. LBNL Sampling Team: Kevin McClay and Julian Fortney

7. Location Notes: 1 cast attempted. Overlaying water was clear and easy to filter.

8. LBNL samples:

Core number GT0048:

| Sample ID | Sample Type | Volume | Storage |
|--------------------------------|-------------|--------|---------|
| SE-20101001-GY-ALTNF001-BC-139 | Intact Core | NA | -80C |
| SU-20101001-GY-ALTNF001-BC-140 | AODC | 20ml | 4C |
| SU-20101001-GY-ALTNF001-BC-141 | DNA Filter | 800ml | -80C |
| SU-20101001-GY-ALTNF001-BC-142 | DNA Filter | 740ml | -80C |
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Station 3

1. Station ID: NF-006-MOD

2. Average Lat: 28.745108

Average Lon: -88.359144

3. Depth: 1517m

4. Time Corer Deployed: 17:12

Time Corer Recovered: 17:44

Time Corer on Deck: 18:22

5. Sample nomenclature:

Sample Type(sediment or overlaying water) – Date – Ship – Site ID – Analysis Type – Unique Identifier

6. LBNL Sampling Team: Kevin McClay and Julian Fortney

7. Location Notes: 1 cast attempted. Overlaying water was clear and easy to filter. Soft sediment interface, likely drilling mud.

8. LBNL samples:

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Core number: GT0052

| Sample ID | Sample Type | Volume | Storage |
|--------------------------------|-------------|--------|---------|
| SE-20101001-GY-NF006MOD-BC-143 | Intact Core | NA | -80C |
| SU-20101001-GY-NF006MOD-BC-144 | AODC | 20ml | 4C |
| SU-20101001-GY-NF006MOD-BC-145 | DNA Filter | 800ml | -80C |
| SU-20101001-GY-NF006MOD-BC-146 | DNA Filter | 730ml | -80C |
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